

# PATENT COOPERATION TREATY

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SCIENTIFIC-ATLANTA, INC.  
LEGAL DEPARTMENT

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
KELLY A. GARDNER  
SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PARKWAY  
LAWRENCEVILLE, GA 30044

PCT

WRITTEN OPINION

(PCT Rule 66)

Applicant's or agent's file reference F-6286-PC		Date of Mailing (day/month/year) <b>30 SEP 2004</b>
International application No. PCT/US01/14150		REPLY DUE within 2 months/days from the above date of mailing
International filing date (day/month/year) 02 May 2001 (02.05.2001)	Priority date (day/month/year) 04 May 2000 (04.05.2000)	
International Patent Classification (IPC) or both national classification and IPC IPC(7): H04N 7/16, 7/167, 7/173, 5/445; G06F 3/00, 13/00 and US Cl.: 725/25-31, 37-47, 109-110		
Applicant SCIENTIFIC-ATLANTA, INC.		

1. This written opinion is the first... (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

3. The applicant is hereby **invited to reply** to this opinion.

**When?** See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.  
For an informal communication with the examiner, see Rule 66.6

**If no reply is filed**, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 04 September 2002 (04.09.2002)

Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer  Hai Tran Telephone No. 703-306-0377
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Form PCT/IPEA/408 (cover sheet) (July 1998)

Nat'l phase deadline  
was 11/4/02.

# WRITTEN OPINION

International application No.

PCT/US01/14150

## 1. Basis of the opinion

1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
 pages 1-22, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_

- ☒ the claims:  
 pages 23-29, as originally filed  
 pages NONE, as amended (together with any statement) under Article 19  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_

- ☒ the drawings:  
 pages 1-10, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_

- ☐ the sequence listing part of the description:  
 pages NONE, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
 These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE \_\_\_\_\_
- ☐ the claims, Nos. NONE \_\_\_\_\_
- ☐ the drawings, sheets/fig NONE \_\_\_\_\_

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

**WRITTEN OPINION**

International application No.  
PCT/US01/14150

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. STATEMENT**

Novelty (N)	Claims 11-15	YES
	Claims 1-10, 16-44	NO
Inventive Step (IS)	Claims NONE	YES
	Claims 1-44	NO
Industrial Applicability (IA)	Claims 1-44	YES
	Claims NONE	NO

**2. CITATIONS AND EXPLANATIONS**

Please See Continuation Sheet

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended, 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

**V. 2. Citations and Explanations:**

Claims 1-10, and 16-44 lack novelty under PCT Article 33(2) as being anticipated by Hsu et al. (WO 98/56188).

Claim 1, Hsu discloses a method for accessing a plurality of services (i.e., entertainment program, on-line purchasing) by a client device coupled to a server device and a display (Fig. 1, 5, 7 & 8), comprising the steps of:

Presenting a user a menu containing a plurality of selectable link (soft buttons of Fig. 5, 7 & 8) representations corresponding to the plurality of services (i.e., Email, Fig. 8; page 20, lines 23-page 21, lines 5);

Receiving user input denoting a selected link representation from the plurality of selectable link representations (page 20, lines 16-20); and

Activating a service of the plurality of services that corresponds to the selected link representation (page 20, lines 23-page 21, lines 5).

Claim 2 Hsu further discloses wherein the plurality of services comprises all applications, channels, and services supported by the server device (i.e., Email, Fig. 8; page 20, lines 23-page 21, lines 5).

Claim 3, Hsu further discloses wherein each selectable link representation of the plurality of selectable link representations corresponds to a link definition that references a service of the plurality of services (page 22, lines 6-35). As to a link definition, it is well known in the art that a "link definition" in Web page is HTML Tags, i.e. <A>, <LINK>, etc... use in the HTML standard language in which Hsu's supplemental content is constructed as Hypertext file (Web page; page 23, lines 12-page 24, lines 41). Therefore, the link definition (HTML Tag) is an inherent feature of the HTML programming language in which Hsu's program guide is programmed with HTML page.

Claim 4, Hsu further discloses wherein each link definition is expressed in HTML (Web page; page 23, lines 12-page 24, lines 41).

Claim 6, Hsu further discloses wherein each link definition includes a URI that references the service referenced by the link definition (Web page; page 23, lines 12-page 24, lines 41; A "link" in this context refers to a URI/URL which is used by the WEB browser application to locate another document/page/file/execution file either located locally at the user terminal or at the Web server of the ISP defined by the developer of the WEB browser);

Claim 7, Hsu further discloses translating the user input denoting the selectable link representation into a service executable call, wherein the service executable call activates the service that corresponds to the selected link representation (page 14, lines 29-page 15, lines 35 and page 20, lines 16-20; i.e., in order to active the button of selected services of Fig. 7,8 in order to obtain further

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

services, i.e. EMail).

Claim 8, Hsu further discloses wherein the menu is presented to the user responsive to the user selecting a channel mapped to the menu of a plurality of channels (Fig. 7; page 10, lines 25-page 16, lines 8).

Claim 9, Hsu (Fig. 1) further discloses presenting the menu to the user upon receiving a command from a remote unit 24, wherein the command from the remote unit is generated from a single user keystroke (page 7, lines 20-32).

Claim 10, Hsu further discloses wherein an IPG presents a scrolling list of channels, wherein one channel of the scrolling list of channels is the menu, and wherein the menu is displayed upon a user initiated selection of the channel in the IPG corresponding to the menu (page 10, lines 3-page 11, lines 18).

Claim 16, "wherein the link definition defining the selected link representation specifies a service resource environment of the service referenced by the selected link representation", is further met by Hsu because Hsu discloses a program guide is programmed in HTML in order to generate display screens and select program guide functionality according to the markup language. Display screen styles and layout of elements are defined using markup language approach. The markup language documents/pages may organize display element attributes (i.e. styles, layout and action attributes) into finite sets of display element attributes, which may be a subset of the attributes, actually programmed into the program guide. The sets of display element attributes may be assigned to the display elements using indicators or tags. Hsu further discloses a display screen may look after a program guide programmed with HTML page in which the system interpreted it for generating the graphical display screen and selecting program guide functionality, such as resized and repositioned a windows according to "digital data" or display element attribute defined in the HTML page of the supplemental content. Therefore, the display element attribute or "digital data" is a "service resource environment" in which it defines the functionality and behavior of sizing, the location of displaying video, graphic, image or text on the display screen in the link definition (HTML Tags) of the EPG HTML page (page 12, lines 8-page 15, lines 35).

Claim 17, Hsu further discloses wherein the service activates and utilizes an entire viewable area of the display responsive to the service resource environment defining a full screen mode (see Fig. 8).

Claim 18, wherein the service referenced by the selected link representation executes on top of a current channel display upon menu initialization responsive to the service resource environment defining a full screen overlay mode (see Fig. 5 and 7).

Claim 19, Hsu further discloses wherein the service referenced by the selected link representation executes on a majority portion of the display and a current channel executes in a reduced portion of the display responsive to the service resource environment defining a full screen obstructed mode (see Fig. 5, page 14, lines 29-35).

Claim 21, wherein each link definition further includes a title attribute referencing additional information about a corresponding service (see Fig. 5, page 14, lines 29-35).

Claim 22, Hsu further discloses wherein the additional information is presented to the user in a window in a fixed position in the menu above a row of the plurality of selectable link representations (page 14, lines 36-page 15, lines 10).

Claim 23-25, "presenting the additional information to the user in a window in a fixed position or pops up to the right of a column or below of the plurality of selectable link representations responsive to the user highlighting the selected link representation" is further met by Hsu (Fig. 5; page 14, lines 29-page 15, lines 10) from the grounds established in claim 16 above.

Claim 26-31, Hsu further discloses an interface for providing access to a plurality of services according to a service authorization for a user of the client device (page 21, lines 6-page 22, lines 5).

Claim 32-36, Hsu further discloses a user interface that includes a second menu of plurality of selectable link representations each corresponding to a popular services based on a tabulation or accessing of the services most frequently accessed by the user (Page 22, lines 20-page 24, lines 28).

Claims 37-38 are analyzed with respect to the above claims.

Claim 39-44, Hsu further discloses a method to create a menu for a user to access a plurality of services by presenting a system operator a graphical list of the plurality of services provided by the server; implementing the server device to incorporate a selectable link representation in the menu and communicating to each of a plurality of client devices to the plurality of selectable link representations designated for incorporation in the menu in which to enable the user to add/disable one or more selectable link representations (page 25, lines 10-page 26, lines 26).

Claims 11-12 lack an inventive step under PCT Article 33(3) as being obvious over Hsu et al. (WO 98/56188) in view of [WWW.W3C.org/International/O-help-lang](http://WWW.W3C.org/International/O-help-lang) <<http://WWW.W3C.org/International/O-help-lang>>.

Claim 11, Hsu does not disclose "... the step of presenting the menu in one of a plurality of languages chosen by the user".

W3C teaches that by adding two links to the document/page in English, one to a French (LANG=fr) document/page and one to a German (LANG=de) one (Paragraph Pointing to translated documents of page 2) from Webmaster/Computer programmer, the document in English will be presented to the Internet user with two (2) links, one in French and one in German in which the Internet user is able to select an equivalent document to the current one, in this case in a different language. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hsu with W3C to present a menu in one of the plurality of languages, as taught by W3C, so to provide to user an alternative way to view the document/page/EPG in an alternative language.

Claim 12, Hsu does not disclose, "... the step of presenting the menu in one of a plurality of languages chosen by a system operator of a server device coupled to the communication terminal, wherein a language configuration is communicated to the client device for implementation in the menu".

W3C teaches that Webmaster/Computer programmer chooses to add two links, one to a French (LANG=fr) document/page

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

and one to a German (LANG=de) one (Paragraph Pointing to translated documents of page 2), to the document/page in English. The document in English will be presented to the Internet user with two (2) links, one in French and one in German in which the Internet user is able to select an equivalent document to the current one in a different language. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hsu with W3C to present a plurality of selectable link representations in one of the plurality of languages, as taught by W3C, so to provide to user an alternative way to view the document/page/EPG in an alternative language.

Claims 13-15 lack an inventive step under PCT Article 33(3) as being obvious over Hsu et al. (WO 98/56188).

Claims 13-15, Hsu further discloses wherein the activating step includes activating the service (see Fig. 8 and from previous analysis).

Hsu does not clearly disclose a short description of a service is included in the link definition defining the selectable link representation.

Including a short description of a service in the link definition (HTML Tags) of HTML syntax for defining the selectable link or using a "label name" (i.e. channel 21) in the link definition (HTML Tags) is well known in the art of computer programming using HTML language, i.e. `< A NAME="anchor-name" >`; `< A HREF="url" >link-text </A >`; `< A HREF="url#anchor-name" >link-text </A >`; `< A HREF="url" >link-text </A >`, etc... Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use of a short description of a service in the link definition (HTML Tags) to define the selectable link with associated URL address in Hsu's HTML file supplemental content so to take the advantage of the inherent feature of HTML programming language for providing a short description to user or to allow user to access the web site that provide the selected services.

**NEW CITATIONS**

W3C, Putting Language attributes in HTML; [www.w3.org/International/O-help-lang](http://www.w3.org/International/O-help-lang); dated 29th April 1997.